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Remarks

Claim 1 has been amended to recite the allowed subject matter of claim 2 and claim 2 has been canceled. Allowed claim 9 has been rewritten as an independent claim. Claims 3, 4 and 8 have been amended to change their dependency from claim 2 to claim 1. Claim 14 has been amended to recite the process steps necessary to place this claim in condition for allowance.

No new matter is being entered. Accordingly, Applicant respectfully asks that the Examiner enter these amendments.

Applicant notes with appreciation the Examiner's allowance of claims 2 – 6, 8 – 10, 13 and 18.

Applicant respectfully traverses the rejection of claims 1, 7, 11, 12, 14 – 17, and 19 – 27 under 35 U.S.C. 102(B) over Yukisawa et al. (US 5,971,057).

Claim 1 and the claims dependent thereon have been placed in condition for allowance by amending claim 1 to recite that the plug assembly includes an interior plug and a shaft wherein the interior plug is adjacent the interior surface of the bottom of the gooseneck and wherein the passageway of the bottom port houses the shaft of the plug assembly.

Regarding claims 14 -17 and 19 - 27, these claims now patentably distinguish over Yukisawa et al. in the recitation of the process steps of housing the plug assembly in the bottom intake port, including an interior plug and a shaft in the plug assembly, locating the interior plug adjacent the interior surface of the bottom of the gooseneck, and housing the shaft of the plug assembly in the passageway of the bottom port.

Yukisawa et al. are deficient in not disclosing or suggesting these key steps to Applicant's claimed process.

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The process of this invention moves the intake port to the bottom wall of the gooseneck and fits the bottom intake port with an interior plug. When the plunger moves upwardly, it creates a vacuum the pulls the interior plug upwardly. The vacuum created by the upwardly moving plunger also pulls or sucks molten metal from the lower portion of the reservoir through the bottom intake port into the chamber. The head of pressure created by the weight of molten metal also forces the molten metal through the open bottom intake port into the chamber. When the plunger moves downwardly, the interior plug moves downwardly and seals the bottom intake port. The interior plug includes a shaft that extends downwardly through the bottom intake port. The shaft of the plug prevents the interior plug from loosing communication with the bottom intake port.

The only knowledge of these process steps comes from Applicants' invention and not the prior art.

Accordingly, Applicants respectfully ask that the Examiner withdraw this rejection under 35 U.S.C. 102.

Applicants respectfully submit that claims 1 and 3 - 27 are in condition for allowance and respectfully ask that the Examiner pass the claims to issue.

Respectfully submitted,

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